IN THE CLAIMS:

Please cancel claims 3 and 31 without prejudice to or disclaimer of the subject matter contained therein.

Please amend the claims as follows:

1. (Amended) A method for preparing and screening a plurality of compounds, said compounds being handled in a bulk of a stationary phase, the method comprises the sequential steps of (a) synthesizing the compounds by a chemical reaction performed in the bulk of a stationary phase, said chemical reaction involving a reaction mixture including chemical reagents, (b) separating the compounds by biological or biochemical method in the same bulk of a stationary phase and (c) screening of the separated compounds in or on the bulk of stationary phase.

2. (Amended) A method according to claim 1, comprising additional analysis of the separated compounds in the bulk of the stationary phase or an isolated sample of the compounds.

4. (Amended) A method according to claim 1, wherein introduction of chemical reagents into the bulk of the stationary

phase provides the reaction mixture which gives rise to the compounds.

5. (Amended) A method according to claim 1, wherein the compounds are synthesised in the bulk of the stationary phase by introducing chemical reagents involved in the chemical reaction into the bulk of the stationary phase thereby generating a reaction mixture.

6. (Amended) A method according to claim 1, wherein each of the chemical reagents is individually introduced into the bulk of the stationary phase.

7. (Amended) A method according to claim 1, wherein each of the chemical reagents is introduced into the bulk of the stationary phase in a solution.

9. (Amended) A method according to claim 1, wherein the reaction mixture is localized in a well-defined area in the bulk of the stationary phase.

10. (Amended) A method according to claim 1, wherein chemical reagents involved in a specific synthesis of the compounds are introduced to a well-defined area on the bulk of the stationary phase.

11. (Amended) A method according to claim 1, wherein various syntheses are performed in parallel on separate and well-defined areas of the same bulk of stationary phase.

12. (Amended) A method according to claim 11, wherein synthesis of the plurality of compounds on the same bulk of a stationary phase provides a library of different compounds.

21. (Amended) A method according to claim 19, wherein the layer thickness of the bulk of the stationary phase when dispersed onto or between the inert backing(s) is 10 μm to 5 mm.

22. (Amended) A method according to claim 19, wherein the combined bulk of stationary phase and inert backing is a silica gel thin-layer chromatography plate with a plastic backing.

32. (Amended) A method according to claim 1, wherein the biological and biochemical methods are selected from bioautographic techniques, overlay techniques, immunostaining, autoradiographic techniques, enzymatic analysis, derivatisation, receptor-binding assays, reporter gene assays, cell proliferation assays, physiologic assays, transient transfection or melanophor pigment-translocation.

33. (Amended) A method according to claim 1, wherein the compounds are screened by means of analytical methods.

Please add the following claims:

--37. A method according to claim 1, wherein the screening step involves either a microorganism or an enzyme.--

--38. (new) A method according to claim 37, wherein the screening step involves a microorganism.--

--39. (new) The method of claim 33, wherein the analytical method is detection of catalytic activity by changes in absorption of light or detection of fluorescence due to a cleaved substrate.--